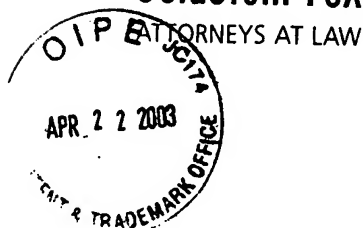


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April 22, 2003

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Commissioner for Patents
Washington, D.C. 20231

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GROUP 3600

Re: U.S. Utility Patent Application
Appl. No. 10/089,517; §371 Date: April 2, 2003
(U.S. National Stage of PCT/NZ00/00189, I.A. filed: September 29, 2000)
For: **Improvements Relating to EER Transmitters**
Inventor: Stephen Ian Mann
Our Ref: 2068.0030000/DJF/LMY

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Information Disclosure Statement;
2. Form PTO-1449 citing twenty-four (24) documents (5 pages); and
3. Return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Donald J. Featherstone
Attorney for Applicant
Registration No. 33,876

DJF/LMY:krd
Enclosures



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Stephen Ian Mann

Appl. No. 10/089,517
(U.S. National Stage of PCT/NZ00/00189,
I.A. filed: September 29, 2000)

§371 Date: April 2, 2003

For: **Improvements Relating to EER
Transmitters**

Confirmation No. 7824

Art Unit: To Be Assigned

Examiner: To Be Assigned

Atty. Docket: 2068.0030000

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Information Disclosure Statement

Commissioner for Patents
Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application

does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

- ☒ 1. This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA), OR within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, OR before the mailing date of a first Office Action on the merits OR before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.
- ☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.
 - ☐ a. I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
 - ☐ b. I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
 - ☐ c. Attached is our Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(p).

- ☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
- ☐ a. I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☒ 4. Documents AC1, AL1, AM1, and AN1 were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
- ☐ 5. A concise explanation of the relevance of the non-English language document(s) appears below:
- ☐ 6. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. _____, filed _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Donald J. Featherstone
Attorney for Applicant
Registration No. 33,876

Date: 4/22/03

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FORM PTO-1449

INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
2068.0030000APPLICATION NO.
10/089,517APPLICANT
Stephen Ian MANN\$371 DATE
April 2, 2003GROUP
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA1	5,251,330	10/05/1993	Chiba et al.			
	AB1	5,351,016	09/27/1994	Dent			
	AC1	5,705,959	01/06/1998	O'Loughlin			
	AD1	5,847,602	12/08/1998	Su			
	AE1	5,886,572	03/23/1999	Myers et al.			
	AF1	6,043,707	03/28/2000	Budnik			
	AG1						
	AH1						
	AI1						
	AJ1						
	AK1						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL1	WO 99/05783	02/1999	PCT	H03F	1/02	Yes No
	AM1	WO 99/54994	10/1999	PCT	H03G H03F	1/00 3/191	Yes No
	AN1	EP 0 360 178 A2	03/1990	Europe	H04L	27/20	Yes No
	AO1						Yes No
	AP1						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>1</u>	International Search Report for Appln. No. PCT/NZ00/00189, issued January 11, 2001, 4 Pages.
	AS	<u>1</u>	Arthanayake, T. and Wood, H.B., "Linear Amplification Using Envelope Feedback", <i>Electronics Letters</i> , April 8, 1971, Vol. 7, No. 7, pp. 145-146.
	AT	<u>1</u>	Cardinal, J-S. and Ghannouchi, F.M., "A New Adaptive Double Envelope Feedback (ADEF) Linearizer for Mobile Radio Power Amplifiers", <i>IEEE MTT-S Digest</i> , IEEE, 1994, pp. 573-576.

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
2068.0030000APPLICATION NO.
1 517APPLICANT
Stephen Ian MANN\$371 DATE
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA2						
	AB2						
	AC2						
	AD2						
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	AH2						
	AI2						
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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL2						Yes No
	AM2						Yes No
	AN2						Yes No
	AO2						Yes No
	AP2						Yes No

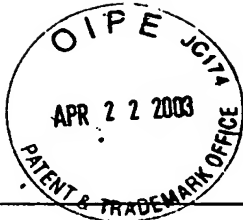
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>2</u>	Chiba, K. et al., "Linearized Saturation Amplifier with Bidirectional Control (LSA-BC) for Digital Mobile Radio", <i>IEEE GLOBECOM 1990 Conference</i> , IEEE, pp. 1958-1962.
	AS	<u>2</u>	Kahn, L.R., "Comparison of Linear Single-Sideband Transmitters with Envelope Elimination and Restoration Single-Sideband Transmitters", <i>Proceedings of the IRE</i> , December 1956, pp. 1706-1712.
	AT	<u>2</u>	Koch, M.J. and Fisher, R.E., "A High Efficiency 835 MHz Linear Power Amplifier for Digital Cellular Telephony", <i>IEEE VTC</i> , IEEE, 1989, pp. 17-18.

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2068.0030000APPLICATION NO.
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Stephen Ian MANN§371 DATE
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA3						
	AB3						
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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL3						Yes No
	AM3						Yes No
	AN3						Yes No
	AO3						Yes No
	AP3						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>3</u>	Lavrushenkov, V.G. et al., "The Features of Using Balanced Envelope Feedback in Power Amplifiers", <i>Telecommunications and Radio Engineering</i> , Vol. 44, No. 8, April 1989, pp. 98-100.
	AS	<u>3</u>	Perrott, M.H. et al., "A 27mW CMOS Fractional-N Synthesizer/Modulator IC", 1997 <i>IEEE International Solid-State Circuits Conference</i> , IEEE, pp. 366-367 and 487.
	AT	<u>3</u>	Petrovic, V. and Gosling, W., "Polar-Loop Transmitter", <i>Electronics Letters</i> , May 10, 1979, Vol. 15, No. 10, pp. 286-288.

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	AA4						
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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL4						Yes No
	AM4						Yes No
	AN4						Yes No
	AO4						Yes No
	AP4						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	4	Petrovic, V. and Smith, C.N., "The Design of VHF SSB Polar-Loop Transmitters", <i>Proceedings of the Conference on Communications Equipment and Systems</i> , April 20-22, 1982, pp. 148-155.
	AS	4	Raab, F.H. et al., "L-Band Transmitter Using Kahn EER Technique", <i>IEEE Transactions on Microwave Theory and Techniques</i> , IEEE, Vol. 46, No. 12, December 1998, pp. 2220-2225.
	AT	4	Riley, T. and Copeland, M.A., "A Simplified Continuous Phase Modulator Technique", <i>IEEE Transactions on Circuits and Systems-II: Analog and Digital Signal Processing</i> , IEEE, Vol. 41, No. 5, May 1994, pp. 321-328.

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	AA5						
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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL5						Yes No
	AM5						Yes No
	AN5						Yes No
	AO5						Yes No
	AP5						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>5</u>	Sowlati, T., et al., "Linearized High Efficiency Class E Power Amplifier for Wireless Communications", <i>IEEE 1996 Custom Integrated Circuits Conference</i> , IEEE, pp. 201-204.
	AS	<u>5</u>	Sowlati, T. et al., "Linear Transmitter Design using High Efficiency Class E Power Amplifier", <i>IEEE Personal Indoor and Mobile Radio Commission Symposium</i> , IEEE, 1995, pp. 1233-1237.
	AT	<u>5</u>	Su, D. and McFarland, W., "An IC for Linearizing RF Power Amplifiers Using Envelope Elimination and Restoration", <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. 33, No. 12, December 1998, pp. 2252-2258.

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